

Hazard assessment of modified [REDACTED] and parental [REDACTED] under simulated environmental conditions

### Introduction

In order to compare the environmental fate of the modified strain [REDACTED] relative to the parent strain [REDACTED] in a simulated environmental condition, a survival test was conducted. A description of the experiment is provided below.

### Experimental Setup

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### Results

[REDACTED]

[REDACTED]

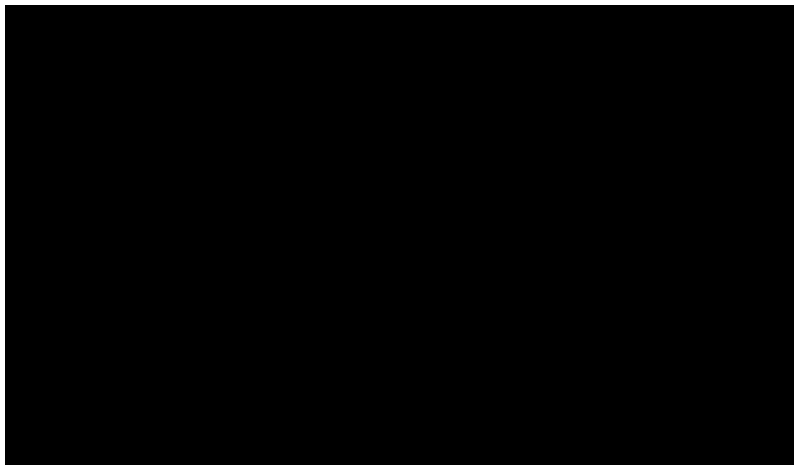
[REDACTED]

[REDACTED] In all cases, the fate of M2519 was very similar to the parent strain M2390; leading to the conclusion that [REDACTED] does not lend any particular survival benefit to the yeast strain. [REDACTED] in both soil and water, all yeast are very stable with no particular growth or death occurring, [REDACTED]

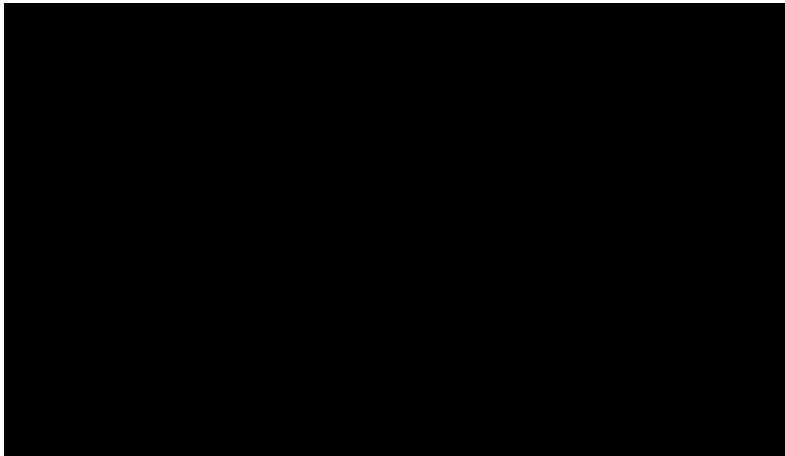
[REDACTED] In Figure 2, [REDACTED] the yeast are also quite stable in the sterile substrates. The [REDACTED] water sample quickly

became overgrown with native organisms. The native soil sample had a significant decrease in yeast population over [REDACTED]. In Figure 3, at [REDACTED] in all substrates except [REDACTED] soil the samples quickly became overgrown with native organisms. In the sterile soil sample, a significant inactivation occurred over [REDACTED].

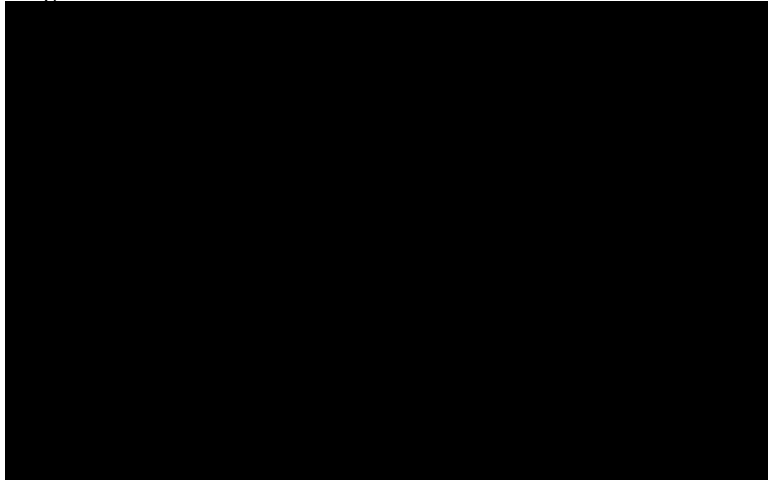
**Figure 1**



**Figure 2**



**Figure 3**



**Conclusions**

Generally, the yeast population was stable or declined in all measurable conditions. The rate of decline of yeast when measurable showed no significant difference between the parent [REDACTED] and the modified [REDACTED]. Therefore based on a review of the public literature and the generated data, we believe that the hazard assessment for the genetically modified [REDACTED] strain is no different than the unmodified parental [REDACTED] strain.